

METHODS FOR GEOMECHANICAL FRACTURE MODELING

ABSTRACT OF THE INVENTION

The present invention relates generally to methods for designing and optimizing the number, placement, and size of fractures in a subterranean formation and more particularly to methods that account for stress interference from other fractures when designing and optimizing the number, placement, and size of fractures in the subterranean formation. The present invention optimizes the number, placement and size of fractures in a subterranean formation. The present invention determinines one or more geomechanical stresses induced by each fracture based on the dimensions and location of each fracture. The present invention determinines a maximum number of fractures and a predicted stress field based on the geomechanical stresses induced by each of the fractures